

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated July 28, 2006 (U.S. Patent Office Paper No. 20060721). In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 1-17 stand for consideration in this application, wherein claims 1, 4-5, 7-9, 11, and 13-17 are being amended to correct formal errors and to more particularly point out and distinctly claim the subject invention.

Additional Amendments

The Abstract and the Disclosure are being amended to correct formal errors. All amendments to the application are fully supported therein. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Formal Objections

Abstract

The Abstract of the Disclosure was objected to on the ground of informalities. Applicants believe that the abstract of the disclosure meets the requirement of 35 U.S.C. §112 as a whole. However, in order to advance the prosecution of this case, the Abstract of the Disclosure is being amended as set forth above. Applicants do not intend to limit the scope of the present invention by this amending of the Abstract. Accordingly, withdrawal of this objection is respectfully requested.

The disclosure

The disclosure was objected to on the ground that it contains an embedded hyperlink and/or other form of browser-executable code on page 7, line 3 and page 13, line 9.

The disclosure is being amended so as to delete the embedded hyperlink and/or other form of browser-executable code. Accordingly, withdrawal of this objection is respectfully requested.

Claims

Claims 1, 8, and 16 were objected to on the grounds of the informalities. As suggested by the Examiner, claims 1, 8 and 16 are being amended. Accordingly, withdrawal of this objection is respectfully requested.

Formal Rejections

Claim 13-15

Claims 13-15 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Also, claims 14-15 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the description requirement. In particular, the Examiner asserted that the term “a lod score” recited in claim 13 and the term “gene clustering” recited in claims 14-15 are not described sufficiently in the applicants’ specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants respectfully disagree.

The meaning of the terms “a lod score” and “gene clustering” are well known to those skilled in the art. To prove this, Applicants hereby submit the following references: 1) Bioinformatics: “A Practical Guide to the Analysis Genes and Proteins” edited by A.D. Raxevanis and B.F.F. Ouellette 2001 Wiley-Liss, Inc.; 2) Am. J. Hum. Genet. 66: 1945-1957, 2000; and 3) Proc. Natl. Acad. Sci. USA Vol. 95, pp 14863-14868, December 1998 Genetics.

Therefore, Applicants respectfully submit that claims 13-15 comply with the enablement requirement under 35 U.S.C. §112, first paragraph.

Claims 1-17

Claims 1-17 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Particularly, the Examiner asserted that claims 1, 4, 8-9, and 11-15 do not comply with 35 U.S.C. §112, second paragraph.

Claims 1, 4, 8-9, and 11-15 are being amended so as to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Associated with these amendments, dependent claims 2-3, 5-7, 10, 16-17 are also definite to particularly point

out and distinctly claim the subject matter which applicant regards as the invention. Accordingly, withdrawal of this rejection is respectfully requested.

Prior Art Rejections

The First 35 U.S.C. §102(b) rejection

Claims 1-5, 7-9, 11 and 16-17 were rejected under 35 U.S.C. §102(b) as being anticipated by Miller et al (US 2002/0091678). Applicants respectfully traverse this rejection for the reasons set forth below.

According to the M.P.E.P. §2131, a claim is anticipated under 35 U.S.C. §102 (a), (b), and (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Claim 1 as amended recites that a network drawing system comprises: a first input unit designating a first query belonging to a first category; a second input unit designating a second query belonging to a second category; a data storage device storing terms belonging to a third category in a form of a table, the third category comprising the first category and the second category, the table including a degree of a relationship between each two of the terms belonging to the third category; a calculation device which calculates a relationship between the input first query and second query through a plurality of terms using the table stored in said data storage device; and a display device displaying on a screen a network of terms linking the first query and the second query through a chain of plurality of terms based on a result of calculation made by said calculation device.

In contrast, Miller merely shows inputting a plurality of query, which are not categorized, are inputted. Miller does not show inputting a first query belonging to a first category and a second query belonging to a second category, respectively. Also, Miller merely shows identifying features of the plurality of query to compare them with data stored in a database and determining relative relationship between each of the plurality of query and the data stored in the database, and displaying points corresponding to the determined relative relationship. Miller does not show calculating relationship between the input first query and second query through a plurality of terms.

Therefore, Miller does not show every element recited in claim 1. Accordingly, claim 1 is not anticipated by Miller.

Claim 16

Claim 16 has the substantially same features as those of claim 1, at least with respect to inputting a first query belonging to a first category and a second query belonging to a second category and calculating relationship between the input first query and second query through a plurality of terms. As such, the arguments set forth above are equally applicable here. Claim 1 being allowable, claim 16 must also be allowable.

Claims 2-5, 7-9, 11, 17

As to dependent claims 2-5, 7-9, 11 and 17, the arguments set forth above with respect to independent claims 1 and 16 are equally applicable here. The corresponding base claims being allowable, claims 2-5, 7-9, 11 and 17 must also be allowable.

The First 35 U.S.C. §103(a) rejection

Claims 10 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Miller in view of Murray et al. (US 6,876,930). This rejection is respectfully traversed for the reasons set forth below.

According to the Manual of Patent Examining Procedure (M.P.E.P. §2143),

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both not found in the prior art, not in the applicant's disclosure.

As set forth above, Miller fails to teach all the elements recited in claim 1, upon which claim 10 depends. The secondary reference of Murray fails to provide any disclosure, teaching or suggestion that make up for the deficiencies in Miller. As such, the arguments set forth above with respect to claim 1 are equally applicable here. Claim 1 being allowable, claim 8 must also be allowable.

The Second 35 U.S.C. §103(a) rejection

Claims 6 and 12-15 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Miller in view of Chamberlin et al. (US 6,941,317).

As set forth above, Miller fails to teach all the elements recited in claim 1, upon which claims 6 and 12-15 depends. The secondary reference of Chamberlin fails to provide any disclosure, teaching or suggestion that make up for the deficiencies in Miller. As such, the arguments set forth above with respect to claim 1 are equally applicable here. Claim 1 being allowable, claims 6 and 12-15 must also be allowable.

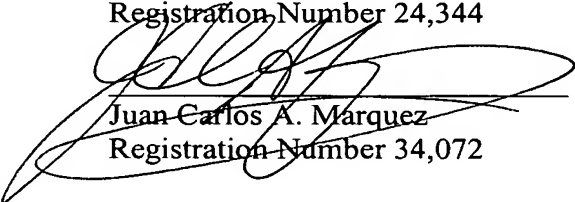
Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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